

Approaches to Estimating Soviet Military Expenditures

Over the years two general approaches have been taken to estimate Soviet military expenditures. These two approaches will be referred to herein as the disaggregation approach and the "building block" approach.

The disaggregation approach is based on the hypothesis that Soviet aggregative releases - the budget, national income, indices of the gross value of output and so on - are true in some sense. Thus, if only the veil of secrecy can be penetrated to obtain precise definitions and the requisite detailed data, the released figures could be disaggregated and their meaning would unfold. This sort of effort has been carried out with less than complete success but has yielded a gross appreciation of the magnitude and trend in the resources (expressed in monetary terms) which the Soviets may have available to devote to defense, nuclear weapons, and space activities.

For this reason and because the disaggregation approach offers little promise of providing for the planner's requirements for detail, for future projections or for insight into the bases for probable Soviet choices between competing weapon systems, the building block approach has tended to become the mainstay for estimating Soviet military expenditures. The results of this latter approach, of course, are compared with the magnitudes which are evolved in the disaggregation approach and are integrated into the various aggregative analyses of the Soviet economy.

The essence of the building block approach is to identify cost centers that have structural significance in Soviet terms (e.g. Badger regiments, MIG-17 regiments, operational strength tank divisions, PVO SA-2 regiments, Strategic Rocket Forces SS-6 regiments and the like). These cost centers not only are designed to reflect the structure of Soviet Forces as the Soviets see them but are also consistent with the intelligence estimating process and are sufficiently detailed to permit manipulation for international comparisons.

The estimates of force structure (order of battle), military manpower, and procurement or production of equipment or weapon systems are identified in terms of or distributed to those cost centers. Meanwhile, unit costs are devised based on the best available direct ruble prices or the combination of the best available estimates of what the units would have cost in dollars and as appropriate ruble-dollar ratios as could be found. Finally, the unit costs are applied to the estimated quantities and the results summarized in a variety of ways: by mission (strategic attack, air defense and so on), by resource category (personnel, procurement, construction and so on) and by industrial origin (machinery, electronics and so on).

Information deficiencies plague the final results of this approach also. Differing degrees of confidence can be attached to the various component parts, depending on the quality of the estimates of quantities and prices which are involved. Relatively high confidence can be attached to the estimates of expenditures for manpower; on the other hand, for those for research, development, test and evaluation the confidence limits are very wide, not only because of the problems of intelligence data, but also because of the inherent problems of defining and measuring such expenditures in any country.